REMARKS

This is in response to the Office Action mailed on February 4, 2004. Claims 1, 19, 35 and 67 are amended to further clarify the recited language, claims 45-66 are canceled, and claims 68-86 are added; as a result, claims 1-44 and 67-86 are now pending in this application.

Information Disclosure Statement

Applicant submitted an Information Disclosure Statement and a 1449 Form on November 7, 2001. Applicant respectfully requests that initialed copies of the 1449 Forms be returned to Applicants' Representatives to indicate that the cited references have been considered by the Examiner.

Additionally, Applicant is submitting a Supplemental Information Disclosure Statement and a corresponding 1449 form on or near the date of this Response. Applicant respectfully requests that initialed copies of these 1449 Forms be returned to Applicants' Representatives to indicate that the cited references have been considered by the Examiner.

Affirmation of Election

As provisionally elected by Applicant's representative, Marvin Beekman, on January 23, 2004, Applicant elects to prosecute the invention of Group I, claims 1-44 and 67. The claims of the non-elected invention, claims 45-66, are hereby canceled. Applicant expressly reserves the right to later file continuations or divisions having claims directed to the non-elected inventions.

§102 Rejection of the Claims

Claims 1-4, 10, 11, 17, 18, 21, 22, 29, 30, 35, 36, 42, 43, 44, and 67 were rejected under 35 USC § 102(b) as being anticipated by Weijand et al. (U.S. Patent No. 5,843,135). Applicant respectfully traverses this rejection.

With respect to originally-filed, independent claims 1, 35 and 67, Applicant respectfully asserts that the rejection does not provide a prima facie case of anticipation with respect to Weijand et al. because the rejection does not identify, among other things, a controller connected to the multiplexer switch where the controller is adapted to selectively connect the first conductor to one of the first electrode and the sensing circuit, as recited in originally-filed claims

Title: MULTIPLEXED MEDICAL DEVICE LEAD WITH STANDARD HEADER

1, 35 and 67. Applicant amended independent claims 1, 35 and 67 to further clarify the recited subject matter.

With respect to amended claim 1, Applicant is unable to find, among other things in Weijand et al., a cardiac stimulus device lead having a multiplexer switch including a first terminal connected to a first electrode and a second terminal connected to a sensing circuit, and a controller connected to the multiplexer switch where the controller is adapted to control the switch to connect the first terminal to and disconnect the second terminal from the first conductor to electrically connect the first electrode to and electrically disconnect the sensing circuit from the first conductor, and to control the switch to connect the second terminal to and disconnect the first terminal from the first conductor to electrically connect the sensing circuit to and electrically disconnect the first electrode from the first conductor, as recited in the claim.

With respect to amended claim 35, Applicant is unable to find, among other things in Weijand et al., a pulse generator having a standard header, and at least one lead for coupling to the standard header, where the lead has a multiplexer switch including a first terminal connected to a first electrode and a second terminal connected to a sensing circuit, and a controller connected to the multiplexer switch where the controller is adapted to control the switch to connect the first terminal to and disconnect the second terminal from the first conductor to electrically connect the first electrode to and electrically disconnect the sensing circuit from the first conductor, and to control the switch to connect the second terminal to and disconnect the first terminal from the first conductor to electrically connect the sensing circuit to and electrically disconnect the first electrode from the first conductor, as recited in the claim.

With respect to amended claim 67, Applicant is unable to find, among other things in Weijand et al., providing a multiplexer switch with a first and second terminal, a sensing circuit and a first electrode; coupling the first conductor to the multiplexer switch where the switch is adapted to connect the first terminal to and disconnect the second terminal from the first conductor and to connect the second terminal to and disconnect the first terminal from the first conductor; and providing a controller coupled to and adapted to control the multiplexer switch to switch between electrically connecting the first electrode to and electrically disconnecting the sensing circuit from the first conductor, and electrically connecting the sensing circuit to and electrically disconnecting the first electrode from the first conductor, as recited in the claim.

Filing Date: November 7, 2001

Title: MULTIPLEXED MEDICAL DEVICE LEAD WITH STANDARD HEADER

Independent claims 1, 35 and 67 are believed to be patentable at least for the reasons provided above. The dependent clams are believed to be patentable at least for the reasons provided with respect to their respective independent claims. Applicant respectfully requests withdrawal of the rejection, and reconsideration and allowance of the claims.

§103 Rejection of the Claims

Claims 1, 5-9, 12-16, 19, 20, 23-28, 31, 32-35, and 37-41 were rejected under 35 USC § 103(a) as being unpatentable over Weijand et al. (U.S. Patent No. 5,843,135). Applicant respectfully traverses this rejection.

Independent claims 1 and 35 are believed to be patentable at least for the reasons provided above with respect to the §102 rejection. The dependent clams are believed to be patentable at least for the reasons provided with respect to their respective independent claims. Applicant respectfully requests withdrawal of the rejection, and reconsideration and allowance of the claims.

Additionally, Applicant respectfully traverses the assertion that Weijand et al. show the capacitor and timing logic and control structure in pacer 30. Applicant respectfully asserts that the rejection fails to apply the recited claim language against a cited reference or references. For example, with respect to claim 5, the recited capacitor is selectively coupled between the first conductor and the second conductor for storing a charge from an electrical pulse.

New Claims

New claims 68-71 depend on independent claim 67, and are believed to be patentable at least for the reasons provided with respect to claim 67.

New independent claim 72 includes language recited in originally-filed claims 1 and 2; and new dependent claims 73 and 74 include language recited in originally-filed claims 3 and 4, respectively. Applicant is unable find, among other things, in Weijand et al. a lead that includes a controller adapted to selectively connect the conductor to the first electrode during a pacing pulse on the first conductor, as recited in independent claim 72. In Weijand et al., an amplifier 55 in the pacemaker device 30 is blanked whenever a pacemaker pulse is delivered from

Dkt: 279.388US1

generator 37. Col. 5 lines 20-22. Dependent claims 73 and 74 are believed to be patentable at least for the reasons provided with respect to independent claim 72.

New independent claim 75 includes language recited in originally-filed claims 1 and 5; and new dependent claims 76-79 include language recited in originally-filed claims 6-9, respectively. Applicant is unable find, among other things, in Weijand et al. a capacitor selectively coupled between the first conductor and the second conductor for storing a charge from an electrical pulse, as recited in independent claim 75. Dependent claims 76 and 79 are believed to be patentable at least for the reasons provided with respect to independent claim 75.

New independent claim 80 includes language recited in originally-filed claims 1, 25 and 26; and new dependent claims 81-82 include language recited in originally-filed claims 27-28, respectively. Applicant is unable find, among other things, in Weijand et al. a controller adapted to selectively connect the first conductor to one of the first electrode and the sensing circuit where the controller includes a timer to time at least one control signal to selectively connect the first conductor to one of the first electrode and the sensing circuit, as recited in independent claim 80. The controller is adapted to sense an electrical pulse, and the timer is adapted to time the at least one control signal to selectively connect the first conductor to the sensing circuit after the electrical pulse. Dependent claims 81 and 82 are believed to be patentable at least for the reasons provided with respect to independent claim 80.

New independent claim 83 includes language recited in originally-filed claims 1 and 31; and new dependent claims 84-86 include language recited in originally-filed claims 32-34, respectively. Applicant is unable find, among other things, in the references relied upon a controller connected to a multiplexer switch, a capacitor, a first switch adapted to selectively couple the capacitor between the first conductor and the second conductor to store a charge on the capacitor from a pacing pulse, and a second switch adapted to selectively couple a power input of the sensing circuit to the capacitor to provide power from the charge stored thereon, as recited in independent claim 83. The controller is adapted to selectively connect the first conductor to one of the first electrode and the sensing circuit, and the multiplexer switch is adapted to selectively couple the first conductor either to the first electrode or to the output of the sensing circuit. The controller is coupled to the capacitor to provide power from the charge stored thereon and is coupled to the control input of the sensing circuit, and the controller is

Serial Number: 10/008529

Filing Date: November 7, 2001

Title: MULTIPLEXED MEDICAL DEVICE LEAD WITH STANDARD HEADER

adapted to control the sensing circuit and to selectively actuate the first switch, the second switch and the multiplexer switch. Dependent claims 84 and 86 are believed to be patentable at least for the reasons provided with respect to independent claim 80.

Serial Number: 10/008529 Filing Date: November 7, 2001

Title: MULTIPLEXED MEDICAL DEVICE LEAD WITH STANDARD HEADER

Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6960 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

PAUL V. GOODE JR.

By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938

Minneapolis, MN 55402

(612) 373-6960

Date _ 3-4-04

Reg. No. 38,377

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, MS: Amendment, P.O. Box 1450, Alexandria, VA 22313-1450 on this day of May, 2004.

Name

Signature